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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,736	01/21/2004	Jim Auber	NOR-1086A	3661
37172	7590	11/02/2006		
WOOD, HERRON & EVANS, LLP (NORDSON) 2700 CAREW TOWER 441 VINE STREET CINCINNATI, OH 45202			EXAMINER CARTAGENA, MELVIN A	
			ART UNIT	PAPER NUMBER
			3754	

DATE MAILED: 11/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/761,736	Applicant(s) AUBER ET AL.	
	Examiner Melvin A. Cartagena	Art Unit 3754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>5032004</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 3, 4, 8, 12 and 15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. According to the specification the pressure in the dispensing path is always greater than the pressure in the recirculation path during operation of the pump and the pressure in the dispensing and recirculation paths would be the same when the pump is not in operation. In addition, the check valve 80 would not operate as described and would close the recirculation path if the pressure in the recirculation path were greater than the pressure in the dispensing path. There is no disclosure in the specifications of how the pressure of the liquid in the recirculation path could be greater than the pressure of the liquid in the dispensing path.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 5, 9, 10, 11 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by US 6,089,413 to Riney et al.

Riney shows a device for dispensing adhesive that performs the steps of pumping liquid through a dispensing path 48 in a manifold to a dispensing module 12, intermittently cycles a dispensing valve 54 in the dispensing module between an open condition, see Fig.3, and an closed condition, see Fig. 2, returning liquid from the module through a recirculation path 66, preventing back flow by closing the recirculation flow path with a valve 94 and valve seat 80, pumping liquid from a supply channel 44 and returning to a recirculation channel 68, during operation of the pump the pressure of the recirculation path is less than that pressure of the dispensing path.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 6, 13, 17-20, 22, 23, 26, 26 and 28-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,089,413 to Riney et al. in view of US 4,200,207 to Akers et al.

Riney shows all claimed features as discussed above except for a check valve positioned in the recirculation outlet of each corresponding dispensing modules. Akares shows a hot melt dispenser with a check valve 9 positioned in the recirculation outlet 78c. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to modify the device of Riney by installing a check valve in the recirculation passageway for recycling part

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or all of the adhesive if the system pressure exceeds the a preset working pressure as taught by Akers.

7. Claims 7, 14, 21, 24, 27 and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,089,413 to Riney et al. as modify by US 4,200,207 to Akers et al. as applied to claims 1, 11, 19, 22, 25, 28, 29 and 31 above, and further in view of US 5,523,682 to Leon.

The Riney-Akers combination shows all claimed features as discussed above except for a sensor for determining the position of the check valve. Leon shows a method of detecting the position of a check valve by using an electromagnetic sensor and sending a signal from the sensor to a controller. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to modify the device of the Riney-Akers combination to include an electromagnetic sensor for determining the position of the check valve to verify operation of the valve without the use of special internal attachments or sealing means or any disassembly of the elements as taught by Leon.

8. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,089,413 to Riney et al. as modify by US 4,200,207 to Akers et al. and US 5,523,682 to Leon as applied to claim 33 above, and further in view of US 4,543,649 to Head et al.

The Riney-Akers-Leon combination shows all claimed features as discussed above but is silent about the sensor being an acoustic sensor. Head shows an ultrasonic sensor T used in a system for detecting the position of a valve. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to modify the device of the Riney-Akers-Leon combination by using an ultrasonic sensor to determine the position of the valve

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since ultrasonic energy travels through fluids and can be used to accurately determine the position of valve element as taught by Head.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nafziger shows a check valve testing system. Scholl shows a control apparatus for pressurized systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin A. Cartagena whose telephone number is (571) 272-4924. The examiner can normally be reached on T-F (7:30AM to 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin P. Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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